

Amendments to the Claims:

Claims 1, 20, 24, 26 and 35 have been amended herein. New claim 36 has been added. Please note that all claims currently pending and under consideration in the referenced application are shown below. Please enter these claims as amended. This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1. (Currently Amended) A method for adjusting transmit power levels of a plurality of transmissions in a wireless communication system, the method comprising:

receiving a first indication in a first power control group of a received quality of a first transmission;

adjusting the transmit power level of the first transmission based at least in part on the first indication;

receiving a second indication in a respectively adjacent second power control group of a received quality of a second transmission, wherein the first and second indications are respectively formed from first and second portions of a plurality of power control bits defined by the system for feedback for the plurality of transmissions, wherein the first and second portions are distributed proportionally differently according to different power control modes of the system; and

adjusting the transmit power level of the second transmission based at least in part on the second indication.

2. (Original) The method of claim 1, wherein the first indication comprises a power control command that indicates whether to increase or decrease the transmit power level of the first transmission.

3. (Original) The method of claim 2, wherein the transmit power levels of the first and second transmissions are adjusted together based on the power control command.

4. (Original) The method of claim 3, wherein a difference between the transmit power levels of the first and second transmissions is adjusted based on the second indication.

5. (Original) The method of claim 2, wherein the power control command is generated based on a comparison of the received quality of the first transmission against a setpoint.

6. (Original) The method of claim 1, wherein the transmit power levels for the first and second transmissions are adjusted based solely on the first and second indications, respectively.

7. (Original) The method of claim 1, wherein second indication comprises an erasure indicator bit indicating whether a frame in the second transmission was received correctly or in error.

8. (Original) The method of claim 1, wherein second indication comprises a quality indicator bit indicating the quality of a received frame in the second transmission.

9. (Previously Presented) The method of claim 1, further comprising:
receiving a third indication of a received quality of a third transmission, wherein the third indication is formed from a third portion of the plurality of power control bits defined by the system for feedback for the plurality of transmissions; and

adjusting the transmit power level of the third transmission based at least in part on the third indication.

10. (Original) The method of claim 1, wherein the first indication is received via a first power control sub-channel and the second indication is received via a second power control sub-channel.

11. (Original) The method of claim 10, wherein the first and second power control sub-channels are formed by time division multiplexing a power control channel.

12. (Original) The method of claim 10, wherein a combined bit rate of the first and second power control sub-channels is limited to a particular bit rate.

13. (Original) The method of claim 10, wherein bits allocated for the second power control sub-channel are aggregated to form the feedback for the second transmission at a lower rate but having increased reliability.

14. (Original) The method of claim 13, wherein the feedback rate of the second transmission is based at least in part on a frame size of the second transmission.

15. (Original) The method of claim 13, wherein the feedback rate of the second transmission is selectable from among a set of possible feedback rates.

16. (Original) The method of claim 10, wherein the second power control sub-channel is operative to send a plurality of metrics for the second transmission.

17. (Original) The method of claim 16, wherein one of the plurality of metrics indicates a step size for adjustment of the transmit power level for the second transmission.

18. (Original) The method of claim 16, wherein one of the plurality of metrics is indicative of an amount of margin in the received quality of the second transmission for no frame erasure.

19. (Original) The method of claim 1, wherein the wireless communication system is a CDMA system that conforms to cdma2000 standard or W-CDMA standard, or both.

20. (Currently Amended) A method for adjusting transmit power levels of a plurality of transmissions in a wireless communication system, the method comprising:

receiving and processing a first transmission to determine a received quality of the first transmission;

forming a first indication for the received quality of the first transmission;

receiving and processing a second transmission to determine a received quality of the second transmission;

forming a second indication for the received quality of the second transmission; and

sending the first and second indications via a first and a respectively adjacent second power control groups, sub-channels, respectively, and

wherein the first and second indications are respectively formed from first and second portions of a plurality of power control bits defined by the system for feedback for the plurality of transmissions, wherein the first and second portions are distributed proportionally differently according to different power control modes of the system.

21. (Original) The method of claim 20, further comprising:

determining a duration of an interruption in the receiving and processing of the first transmission; and

signaling for an increase in the transmit power level for the first transmission if the duration of the interruption is less than a particular time period.

22. (Previously Presented) The method of claim 21, wherein the signaling is performed if the duration of the interruption is less than or equal to half a period of a frame in the first transmission.

23. (Previously Presented) The method of claim 21, wherein an amount of increase in the transmit power level for the first transmission is based on the duration of the interruption and the period of a frame in the first transmission.

24. (Currently Amended) A power control unit for use in a wireless communication system, comprising:

a signal quality measurement unit operative to receive and process a first transmission to provide a first indication in a first power control group for a first metric for the first transmission;

a data processor operative to receive and process a second transmission to provide a second indication in a respectively adjacent second power control group for a second metric for the second transmission;

a power control processor coupled to the signal quality measurement unit and the data processor, the power control processor operative to direct transmission of the first and second indications on the first and second power control groups, sub-channels, respectively, and

wherein the first and second indications are respectively formed from first and second portions of a plurality of power control bits defined by the system for feedback for the transmissions, wherein the first and second portions are distributed proportionally differently according to different power control modes of the system.

25. (Cancelled)

26. (Currently Amended) A power control unit within a base station in a wireless communication system, comprising:

a channel processor operative to receive and process a received signal to recover a first indication in a first power control group of a received quality of a first transmission and a second indication in a respectively adjacent second power control group of a received quality of a second transmission, wherein the first and second indications are respectively formed from first and second portions of a plurality of power control bits defined by the system for feedback for the transmissions, wherein the first and second portions are distributed proportionally differently according to different power control modes of the system; and

a power control processor coupled to the channel processor and operative to receive the first and second indications and provide one or more commands to adjust transmit power levels of the first and second transmissions.

27. (Previously Presented) The method of claim 5, wherein the setpoint is adjusted based on the received quality of the first transmission.

28. (Previously Presented) The method of claim 5, wherein the setpoint is adjusted upward responsive to the received quality of the first transmission being greater than the setpoint.

29. (Previously Presented) The method of claim 5, wherein the setpoint is adjusted downward responsive to the received quality of the first transmission being less than the setpoint.

30. (Previously Presented) The method of claim 28, wherein the setpoint is adjusted downward responsive to the received quality of the first transmission being less than the setpoint.

31. (Previously Presented) The method of claim 5, wherein a period between adjustments in setpoint is adjustable.

32. (Previously Presented) The method of claim 28, wherein a period between successive upward adjustments in the setpoint is adjustable.

33. (Previously Presented) The method of claim 29, wherein a period between successive downward adjustments in setpoint is adjustable.

34. (Previously Presented) The method of claim 30, wherein the amount of upward adjustment in setpoint is independent of the amount of downward adjustment in setpoint.

35. (Currently Amended) A method for adjusting transmit power levels of a plurality of transmissions in a wireless communication system, the method comprising:

receiving a first indication in a first power control group of a received quality of a first transmission;

adjusting the transmit power level of the first transmission based at least in part on the first indication;

receiving a second indication in a respectively adjacent second power control group of a received quality of a second transmission, wherein the first and second indications are respectively formed from first and second portions of a plurality of power control bits defined by the system for feedback for the plurality of transmissions, wherein the first and second portions are distributed proportionally differently according to different power control modes of the system, wherein the plurality of power control bits have a rate equal to that of the first indication; and

adjusting the transmit power level of the second transmission based at least in part on the second indication.

36. (New) A processor-readable medium including processor-executable instructions thereon for performing a method for adjusting transmit power levels of a plurality of transmissions in a wireless communication system, the method comprising:

receiving and processing a first transmission to determine a received quality of the first transmission;

forming a first indication for the received quality of the first transmission;

receiving and processing a second transmission to determine a received quality of the second transmission;

forming a second indication for the received quality of the second transmission; and

sending the first and second indications via a first and a respectively adjacent second power control groups, respectively, and

wherein the first and second indications are respectively formed from first and second portions of a plurality of power control bits defined by the system for feedback for the plurality of transmissions, wherein the first and second portions are distributed proportionally differently according to different power control modes of the system.